PAN-PACIFIC ENTOMOLOGIST
75(1): 8–12, (1999)

STUDIES ON THE CHRYSOMELIDAE (COLEOPTERA) OF THE BAJA CALIFORNIA PENINSULA: A NEW SPECIES OF *SCELOLYPERUS* (GALERUCINAE), WITH NOTES ON THE GENUS IN BAJA CALIFORNIA

ARTHUR J. GILBERT[1] AND FRED G. ANDREWS[2]

[1]Department of Food & Agriculture, Division of Plant Industry, Pest Detection, 2889 N. Larkin #106, Fresno, California 93727

[2]Department of Food & Agriculture, Division of Plant Industry, Analysis & Identification, 1220 N. Street, Sacramento, California 95814

Abstract.—*Scelolyperus clarki* NEW SPECIES is described from Baja California, Mexico. Notes on the hosts and distribution for *Scelolyperus* Crotch species in Baja California are presented.

Key Words.—Insecta, *Scelolyperus, clarki, phoxus, torquatus, varipes,* Baja California Peninsula, Baja California, Mexico, Coleoptera, Chrysomelidae, Galerucinae.

The North American species of the genus *Scelolyperus* Crotch have very recently been reviewed by Clark (1996). During a visit to the University of California Essig Museum to obtain specimens for our continuing work on the Chrysomelidae of the Baja California Peninsula, a series of specimens of *Scelolyperus* was found that at first was thought to be a very common species, *S. torquatus* (LeConte). A precautionary check of the aedeagus revealed a new species. All species of *Scelolyperus* found on the Baja California Peninsula occur in the northern part of the State of Baja California (Fig. 7).

Specimen Depositories.—The following abbreviations refer to: CAS—California Academy of Sciences, CDFA—California Department of Food & Agriculture, UNAM—Universidad Nacional Autonoma de Mexico, UCBC—University of California, Berkeley Collection.

SCELOLYPERUS CLARKI Gilbert & Andrews, NEW SPECIES

Types.—Holotype (male) and Allotype (female): MEXICO. *BAJA CALIFORNIA:* 11.3 km (7 mi.) SE Maneadero, 25 Mar 1973, 100′ el., J. Doyen, on *Ceanothus:* Type and Allotype deposited in the University of California, Berkeley Collection. PARATYPES (20)-(9) Same data as holotype; (11) same data as holotype, except no host data given (2) [CAS]; (2) [CDFA]; (2) [UNAM]; (14) [UCBC].

Description.—Male (holotype). Length 3.9 mm; width 1.5 mm. Form elongate; prothorax testaceous, narrower than elytra. Body color black, elytra metallic green or blue. Head dark brown to black, vertex alutaceous, basically impunctate with metallic luster, a few inconspicuous setae near eyes and along margin with interocular sulcus; interocular sulcus distinct; interocular width approximately 1.5 times width of eyes (on a line drawn through center of eyes when viewed head on); eyes entire; frontal tubercles distinct, smooth, flat, separated from each other by a distinct sulcus; tubercles separated from interantennal carina by shallow sulci; antennal fossae separated by a distance subequal to length of antennomere II; interantennal carina well developed, forming a longitudinal, angulate ridge; genal length subequal to maximum width of antennomere I; antennae extending beyond humeri; antennomeres 1–4 totally or partially testaceous; 5–11 dark brown. Pronotum 1.2 times wider than long (width measured at the widest portion—apical one-third); virtually glabrous (setose punctures visible under high magnification), alutaceous with shallow punctures that become more coarse and dense posteriorly.

Scutellum dark brown, polished, impunctate. Elytra 1.9 times longer than wide; slightly rugose (viewed at an angle), alutaceous, investitus (very scattered inconspicuous setae visible under high magnification) with dense, coarse, broad, irregularly placed punctures; most punctures separated by the width of the punctures or less, occasionally coalescing. Venter black, pubescent; procoxal cavity open; procoxae conical, narrowly separated; last ventrite with a short, broad, truncate lobe. Legs all of approximately equal size, shape; femora black, tibia and tarsi brown (except base of protibia which is testaceous). Genitalia as in Figs. 1 and 2.

Female (Allotype).—Similar to holotype, differing in the following characters: size slightly larger (length 3.8 mm; width 1.4 mm); last abdominal sternum not lobed; dorsum shining, only faintly alutaceous.

Variation.—Male: length 3.3–3.9 mm; width at elytral humeri 1.1–1.5 mm. Female: length 3.1–3.9 mm; width 1.1–1.5 mm.

Diagnosis.—*Scelolyperus clarki* NEW SPECIES would key to couplet 11 in the key presented by Clark (1996). However, it can be readily distinguished from the two species in this couplet, *S. torquatus* (LeConte) and *S. phoxus* Wilcox, by the aedeagus (Figs. 1–6) and the coarser elytral punctation. Examination of the aedeagus will provide positive identification. The only other *Scelolyperus* species recorded from Baja California, *S. varipes,* is larger, has a dark pronotum and a very different aedeagus.

Host.—Eleven of the twenty-two specimens in the type series of *Scelolyperus clarki* were collected from *Ceanothus* (Rhamnaceae). No plant association was given for the other 11 specimens in this series. Adults of *S. torquatus* are also associated with *Ceanothus* and occupy the same habitat in Baja California.

Etymology.—Named for Shawn Clark.

Material Examined.—See types.

SCELOLYPERUS PHOXUS Wilcox

Clark (1996) reports this species from Los Angeles and Riverside Counties in California. A single female specimen collected 3.2 km (2 mi) SE of El Topo (Fig. 7), without host data, appears to be *S. phoxus,* but without a male specimen this determination cannot be certain. This would extend the range into northern Baja California. Most likely this species occupies similar habitat as in that portion of California between Los Angeles County and Baja California. The senior author has collected a large series of this species in association with *Adenostoma fasciculatum* Hooker & Arnott (Rosaceae) in the Mt. Baldy area of Los Angeles County. The *Adenostoma* must be in bloom for the adults to be found. It may be that the adults are pollen feeding. However, beetles were very concentrated on individual plants possibly indicating that they may be congregating for mating or have just emerged from pupae in the soil beneath these plants. Other species of perennial plants that were in bloom did not have beetles associated with them. *A. fasciculatum* extends into Baja California (Wiggens 1980, Roberts 1989) and may also have the same association with *S. phoxus.*

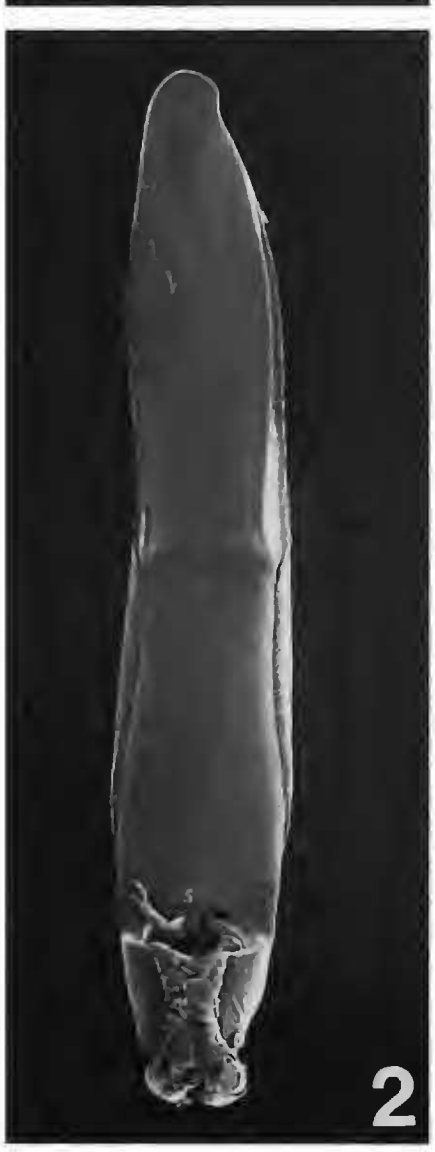
SCELOLYPERUS TORQUATUS (LeConte)

In California *S. torquatus* is a very common and widely distributed species. Clark (1996) reports this species collected on a variety of plant species. However, it can be found most commonly and abundantly on *Ceanothus* and *Adenostoma* when these plants are in bloom. Clark (1996) and Wilcox (1965) both report *S. torquatus* from Baja California. We have examined numerous specimens also


1


3


5


2


4


6

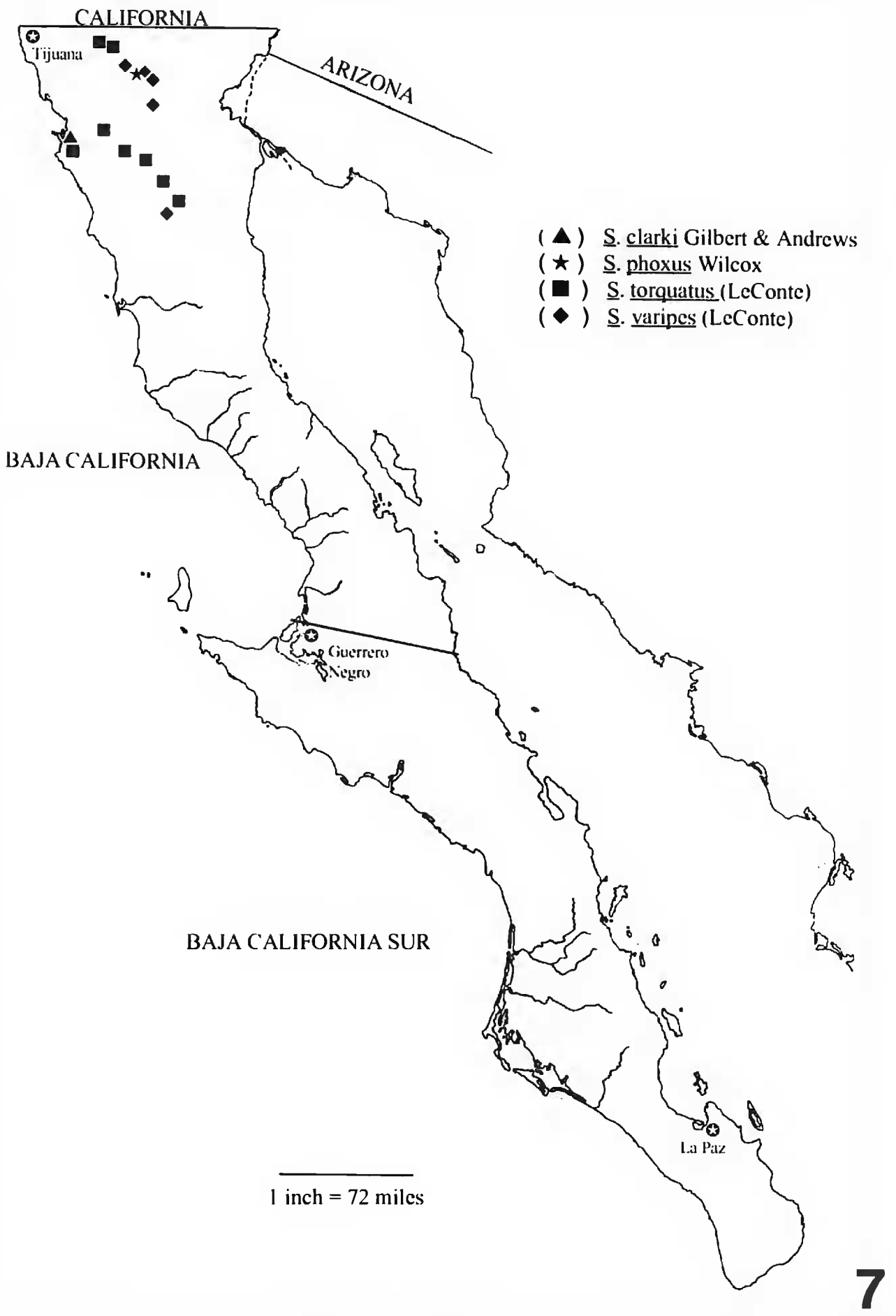


Figure 7. Known geographical distribution of *Scelolyperus* species in the Baja California Peninsula.

←

Figures 1–6. Male aedeagus. Figure 1. *Scelolyperus clarki,* lateral view. Figure 2. *Scelolyperus clarki,* ventral view. Figure 3. *Scelolyperus torquatus,* lateral view. Figure 4. *Scelolyperus torquatus,* ventral view. Figure 5. *Scelolyperus phoxus,* lateral view. Figure 6. *Scelolyperus phoxus,* ventral view.

collected in the very northern portion of Baja California; 0.62 km (1 mi) S El Condor, 3.2 km (2 mi) (no direction given) Santo Tomas Arroyo, upper Canyon del Cantil, Sierra Juarez, Ejido Uruapan, 23 km E. Ensenada, 47 km E. Ensenada, 77 km SE. Ensenada and 98 km SE. Ensenada (Fig. 7).

Scelolyperus varipes (LeConte)

Scelolyperus varipes is distributed from British Columbia to Montana to New Mexico and California (Clark 1996). We have examined five specimens from the following five localities in Baja California: El Topo; 4.8 km (3 mi) S Laguna Hansen; Las Encinas, Sierra San Pedro Martir; 9.7 km (6 mi) N Laguna Hansen, Sierra Juarez and 3.5 km (2.2 mi) S El Topo, Sierra Juarez (Fig. 7).

Acknowledgment

Specimens were made available for this study by Cheryl Barr, University of California, Berkeley—California Insect Survey, E. L. Sleeper, California State University, Long Beach and Dave Faulkner, San Diego County Natural History Museum.

Literature Cited

Clark, Shawn M. 1996. The Genus *Scelolyperus* Crotch in North America (Coleoptera: Chrysomelidae: Galerucinae). Insecta Mundi, 10: 261–280.

Roberts, Norman C. 1989. Baja California plant field guide. Natural History Publishing Company, La Jolla, California.

Wilcox, J. A. 1965. A synopsis of the North American Galerucinae (Coleoptera: Chrysomelidae). Bull. N.Y. St. Mus. Sci. Serv., no. 400: 1–226.

Wiggens, I. L. 1980. Flora of Baja California. Stanford University Press, Palo Alto, California.

Received 18 May 1998; Accepted 11 Nov 1998.